CHAPTER II

ISSUES IN MAKING PAY COMPARABLE FOR GENERAL SCHEDULE WORKERS

Using salaries outside government as a guide in setting federal rates is not new. The Federal Salary Reform Act of 1962 established comparability as the guiding principle in setting pay. Comparability, supporters contended, would help to ensure the government's ability to attract and retain the employees needed to carry out government programs. The act ended a long period of haphazard adjustments to federal salaries. The Federal Pay Comparability Act of 1970 reaffirmed federal policy and established a methodology and procedures for adjusting rates of pay.

Under the comparability system that preceded the most recent reform (the Federal Employees Pay Comparability Act of 1990), a single pay scale provided a uniform pay range at each grade of the General Schedule nationwide. Under that system, a grade 4 secretary in Washington, D.C., had the same salary as a grade 4 secretary in Syracuse, New York. As under current practice, the system relied on surveys of salaries outside the federal government but made no distinctions by geographic area.

Primarily for budgetary reasons, the government capped most raises granted under the old system below the levels needed to achieve comparability. In fact, not one raise granted after 1977 was at the full level. Moreover, the government applied the same reduced raises to all grades regardless of the size of the pay gap at a grade. Consequently, the pay gap by the late 1980s had grown to about 30 percent on average, with much larger gaps for the upper grades and for some professional and other occupations.

With pay gaps growing, concern mounted about the government's ability to recruit and retain workers, and calls for reform became more frequent. Reforms embodied in FEPCA were intended to achieve a number of objectives. The act reaffirmed the importance of comparability in ensuring the government's ability to compete for labor. To minimize the budgetary impact of establishing comparability, the adjustments were to be made over many years. In implementing locality pay and thereby moving away from a single national pay scale, the act allowed for some response to local differences in labor markets. The act also provided for long-urged reforms of government pay surveys.

Nevertheless, FEPCA has not escaped criticism. Many of the concerns surrounding the former national system are also being raised about the locality

system. The President himself has expressed reservations about the methodology for determining pay raises adopted under FEPCA.[1]

This paper addresses three long-standing issues: how the government collects data on nonfederal salaries, how it matches jobs for purposes of comparison, and how it applies locality raises once they have been set. Reforms in FEPCA have addressed some complaints about the government's pay program, and other complaints may be overstated. Despite its problems, the current system represents one of the largest, most sophisticated, and most complex adopted by an employer to ensure fair and competitive salaries. The benefits of further refinements must be weighed against added costs and complexity.

CONCERNS ABOUT PAY SURVEYS

Salary data collected by the Bureau of Labor Statistics (BLS) has helped to determine comparability raises under both the current system and its predecessor. Those surveys have been the subject of considerable concern over the years. Current surveys incorporate a number of reforms, and BLS plans further improvements.

BLS Surveys and the Computation of Pay Gaps

The Bureau of Labor Statistics has for years conducted surveys of wages and salaries for use by both business and government. For FEPCA, BLS has combined and modified two established surveys--the Area Wage Surveys and the White-Collar Pay Surveys. Surveys for the 1995 locality raise cover establishments with 50 or more workers. The firms surveyed represent all nonagricultural industries, including communications, construction, finance, retailing, and transportation. Surveys also cover state and local governments.

Under current procedures, survey experts visit establishments and collect data for jobs they find that correspond to official descriptions of federal jobs included in the survey. The experts use the same descriptions in all geographic areas. The Office of Personnel Management (OPM) develops those descriptions, in collaboration with BLS, on the basis of official job standards that set out the duties and responsibilities of most jobs in government. Federal employees, however, may or may not actually perform at the level put forth in the job descriptions used in the pay surveys. BLS tests descriptions to ensure their relevance to work performed outside the federal government. BLS gathers data at various points in time; OPM

1. Executive Office of the President, *A Vision of Change for America*, report accompanying the President's address to the Joint Session of the Congress (February 17, 1993), p. 85.

then uses the employment cost index to adjust, or "age," the data to a date that corresponds to federal pay on the date used in comparisons. (The ECI aging factor covers wages and salaries for white-collar workers, excluding those in retail sales.)

BLS collects data for only a sample of the more than 450 federal white-collar occupations. Surveys for the 1995 locality raise cover 25 different occupations spanning 107 different jobs. Those jobs represent about 30 percent of the General Schedule workforce. (In this discussion, a job refers to work of a given level in an occupation--for example, entry-level secretary. Occupations in a BLS survey often cover several levels of work. Generally, work levels correspond to grades of the General Schedule.) BLS could not find acceptable data for all jobs in any of the areas surveyed. Only 19 jobs produced publishable data in all areas, according to OPM (see the discussion below). The government established 27 pay areas for the 1995 locality adjustment.

OPM uses a three-step process to collapse the nonfederal data on various jobs into the single average used in estimating a pay gap for each locality. First, it calculates a single average nonfederal salary for each group of similar occupations at a grade. For example, the salaries for the technical jobs at grade 3 would become a single average salary. The figure calculated is a weighted average. The weights the government uses reflect nationwide (continental United States) federal employment for the grade and occupation, not local federal employment. Using nationwide federal weights at this point in the calculation permits the use of more of the nonfederal data the government collects.[2]

Next, OPM collapses the averages for all occupational groups in a grade into a single weighted average for that grade, based on local federal employment. Finally, the average at each grade is collapsed into a single weighted average for the locality based on the grade distribution of federal employment in the area. Table 7 illustrates the process by which data on a set of jobs in a locality are combined into a single average.

2. The government does not have federal employees in every surveyed job in each area. In such cases, there is no local federal employment to use as a weight. Thus, if the government chose to use local weights in the initial stages of its calculations, it would not always have all the weights it needed and could not always use all the nonfederal data it collected. Retaining a broad mix of data is important because each surveyed job represents itself and all similar jobs. Excluding data could lead to results that are not representative. Subsequent stages in the calculations cover broader categories of workers for which the government is more likely to have local employment data to use as weights.

TABLE 7. ILLUSTRATION OF THE THREE-STEP PROCESS FOR CALCULATING A SINGLE AVERAGE NONFEDERAL SALARY USING DATA FOR A SET OF JOBS

	Number of Federal Employees	Average Nonfederal Pay (Dollars)
Step 1. Use National Federal Employment Data to Combine Nonfederal Salaries for a Set of Jobs into a Single Average for Each Occupational Group[a]		
Grade 3		
Clerical occupations		
Account clerk II	81	18,811
Word processor I	3,079	19,348
Total	3,160	19,334
Technical occupations		
Drafter I	2	23,863
Engineer technician I	15	23,326
Total	17	23,389
Grade 4		
Clerical occupations		
Account clerk III	426	23,164
Word processor II	14,405	23,110
Secretary I	6,772	20,853
Total	21,603	22,404
Technical occupations		
Drafter II	34	28,002
Engineer technician II	172	22,143
Total	206	23,110
Step 2. Use Local Federal Employment Data to Combine Occupational Averages into Averages for Each Grade[b]		
Grade 3		
Clerical occupations	77	19,334
Technical occupations	14	23,389
Total	91	19,958
Grade 4		
Clerical occupations	398	22,404
Technical occupations	115	23,110
Total	513	22,562
Step 3. Use Local Federal Employment Data to Combine the Grade Averages into a Single Average for All Grades[c]		
Grade 3	91	19,958
Grade 4	513	22,562
All Grades	604	22,170

SOURCE: Congressional Budget Office.

NOTE: This illustration covers only some of the jobs and grades used in actual calculations. The roman numerals after occupations indicate the level of work. A level I job, for example, generally indicates an entry-level position.

a. Employment data reflect the nationwide total at the grade and job indicated.

b. Employment data reflect local employment in each grade and occupational group.

c. Employment data reflect local employment in each grade.

To compute the pay gap, OPM compares the single weighted average for each locality with the federal average salary for the area. Pay gaps and locality raises are part of the annual report to the President from the Pay Agent.[3]

Coverage of Nonfederal Jobs in BLS Pay Surveys

The most persistent concerns about pay comparability in government are those having to do with pay surveys, particularly their coverage. Adequate and balanced coverage ensures that the survey results accurately represent the nonfederal experience the government attempts to match under FEPCA. If, for example, BLS surveys covered only high-paying industries and jobs, or if BLS was able to find reliable data only for such industries and jobs, then estimates of the pay gap would overstate differences in salaries.

Many difficult issues arise in putting together locality pay surveys. An ongoing concern is finding data that meet BLS's standards for publication and statistical reliability for the many jobs surveyed in each locality. Surveys conducted for the 1995 locality adjustment produced usable data for about two-thirds of the jobs surveyed. The range of jobs used, according to OPM, runs from a low of 47 in Albuquerque, New Mexico, to a high of 97 for the area designated "Rest of United States." The government supplements raw survey data with data generated by a multiple regression model of nonfederal pay that makes salary a function of area, occupational group, and grade. Under that approach, data are available in each geographic area for all jobs used in pay comparisons.

Whether the federal survey covers a sufficient number of jobs has also been of concern to critics. Under current practice, BLS chooses a job for its survey if the job has a large federal representation and if it will produce an adequate amount of suitable data from nonfederal sources. Based on data collected for the 1994 locality adjustment, the jobs included in pay surveys covered directly about 37 percent of the GS workforce at the lower five grades, 21 percent at the middle grades, and 33 percent at the top five grades.

Over the years, BLS has responded to concerns about coverage by repeatedly adding jobs and by substituting jobs or revising job descriptions to increase the amount of publishable data yielded. In addition, it adopted changes designed to expand the number of industries surveyed and to cover more small firms. In 1979, for example, BLS surveys covered firms with a minimum of 50, 100, or 250

3. The President's Pay Agent is the Secretary of Labor and the Directors of the Office of Personnel Management and the Office of Management and Budget.

employees, depending on the industry. Surveys for that year produced data for 21 occupations covering 89 different jobs. By 1990, the minimum firm size had been lowered to 50 employees for all industries, and surveys had been expanded to include 32 occupations covering 147 jobs. The 26 occupations and 110 jobs covered by the first locality pay survey represent a reduction from the 1990 level, but BLS continues to plan for the expansion of the survey as resources permit. The first locality survey for FEPCA also responded to a long-standing concern of critics by covering state and local governments for the first time.

CONCERNS ABOUT MATCHING JOBS IN PAY COMPARISONS AND THE POSITION CLASSIFICATION SYSTEM

The process for comparing jobs has also been an issue for many years. Under current and past practices, the government collects data on nonfederal salaries for jobs that correspond to official descriptions of federal work. Under such a plan, mispayments will occur if the actual duties of federal employees do not correspond to official descriptions. Employees whose job involves less responsibility than it is supposed to will be overpaid, and employees with more responsibility will be underpaid. How often such misclassification of jobs occurs is uncertain. Reforming the system used to rank and classify jobs, however, would be a more appropriate response to the problem than changing the pay system, unless misclassification is widespread and uniform.

The General Schedule Classification System

In the federal system, pay comparisons help to establish the salary range at each grade of the General Schedule, and the federal classification system assigns the different jobs in government to those grades. As previously described, grade assignments primarily reflect duties and responsibilities; for example, computer analyst jobs that involve supervisory responsibility generally rate a higher grade than those that do not. The classification system plays an essential role in achieving comparability between federal and nonfederal salaries. Pay surveys and other practices under FEPCA may produce a salary for GS grade 6 that accurately reflects nonfederal experience at that grade, but if some federal jobs assigned to that grade do not involve the level of work expected--that is, they are misclassified--employees in those jobs will be over- or underpaid.

The current federal GS classification system began with the Classification Act of 1949. In addition to grade, that system determines pay plan, occupational group, and job title. Agency managers and classifiers have primary responsibility for classifying positions. OPM provides oversight and direction. The basic objectives

of the system are to provide equal pay for equal work, ensure fair differences in pay for unequal work, and offer a systematic approach to organizing federal jobs.

In assigning grades, agency classifiers use official position classification standards prepared by OPM that describe the duties, responsibilities, scope of command, and other factors that should be associated with each job at each grade. The government uses those standards in preparing the job descriptions used in pay surveys. Such standards help to achieve some consistency in decisions about job classifications.

Increases in Average Grade

From March 1985 to March 1994, the average grade for full-time employees under the General Schedule increased by about one grade, from 8.4 to 9.3. That pattern continues a long-term upward trend: in 1975, the average GS grade was 7.9, more than a grade below the current level.

Many factors have contributed to the increase in the average grade of the GS workforce. Determining the actual size of each factor's contribution is difficult, but analysis by OPM suggests that the changing nature of governmental work accounts for over half of the increase. As described in Chapter I, federal agencies rely increasingly on professional and administrative workers, who generally have higher grades than workers in other occupations. That emphasis reflects an increase in both the size and complexity of the demands placed on government.

Several other factors may have contributed to grade increases. One is the government's routine reclassification of jobs to reflect changes in the nature of work the jobs involve. Also, the increased reliance on contracting with the private sector for goods and services has heightened the government's need for well-trained professionals to prepare and monitor contracts while shifting some lesser-skilled positions to private contractors. Misclassification, too, may have contributed to the overall rise in average grade.

Misclassification of Federal Jobs

Analyses by the Office of Personnel Management, the National Academy of Public Administration, and others have revealed some problems with misclassification of federal jobs. Those studies found both overgrading and undergrading (jobs assigned to a grade above or below that justified by the duties and responsibilities performed). The problems with misclassification, however, were not found to be very widespread.

How do jobs end up at the wrong grade? Some misclassification may result from simple errors by classifiers. Jobs may also become misclassified during reorganizations or reductions in employment. Grade assignments may not keep abreast of the changes in mission and scope of command that often accompany such efforts. Managers who feel that the low federal salaries of recent years have made it difficult to recruit and retain workers may also overstate a position's responsibilities to a obtain a higher grade and pay. Finally, the classification standards for a position may simply no longer reflect, in general, the nature of the work they intend to describe.

In a 1983 analysis, OPM estimated that 14.3 percent of the GS workforce was overgraded and 1.5 percent was undergraded.[4] That analysis involved audits conducted in 1980 and 1981 of more than 700 GS full-time permanent positions selected at random.

No one knows the current extent of overgrading. On the one hand, successive limits on federal pay raises may have increased pressures on managers to overgrade jobs to get higher pay for employees. At the time of the 1983 OPM report, the President's Pay Agent estimated the pay gap at around 20 percent--well below the current level of 28 percent. In addition, the many recent reorganizations and reductions in employment may have contributed to overgrading. On the other hand, the tight budgets of recent years may have, in some cases, made it harder for agencies to bear the costs of overgrading. Special pay rates, geographic differentials, and similar measures, moreover, may have reduced pressures to use the classification system to boost the pay of federal workers.

The only current data available on misgrading come from surveys done by the Department of Defense as part of its annual evaluations of personnel management. Though limited in scope, those annual reviews suggest that the incidence of overgrading is no higher than in 1983 and may have actually decreased dramatically. For the years 1989 through 1992, for example, audits of 3,534 positions in the Army and the Navy show that 2.0 percent of the workforce was overgraded and 1.3 percent was undergraded.

Costs of Misclassification in Government

When a job is overgraded, the government pays more for the work it receives than it would if the job was correctly graded. Overgrading also overstates the cost of

4. Office of Personnel Management, *Federal White-Collar Position Classification Accuracy* (March 1983). See also Congressional Budget Office, *Changing the Classification of Federal White-Collar Jobs*, CBO Paper (July 1991).

reaching pay comparability under FEPCA. Estimating overall costs is problematic, however, because the extent of overgrading in government is unclear.

The Congressional Budget Office's analysis suggests that each percent of overgrading costs government the equivalent of 0.15 percent of payroll. That estimate assumes that misgraded positions occur proportionately among grades and that positions are overgraded, on average, by one work level. (For most jobs in government, a work level corresponds to a grade; for jobs in professional and administrative occupations, a work level corresponds to two grades.)

The CBO estimate compares the salaries of federal workers at the wrong grade with those of workers at the correct grade. Compared with workers outside the federal government, however, overgraded workers may not be overpaid at all. From that perspective, the cost of misclassification appears insignificant against the savings the government realizes by paying salaries that are, on average, so far below comparability. Nevertheless, accurate classification remains important for ensuring the fairness, efficiency, and credibility of the pay system.

Correcting the Classification of Federal Jobs

The government has several alternatives in dealing with the misclassification of federal jobs. Should the problem prove much more widespread than suggested by available data, some basic adjustments in the process for comparing pay may be warranted. Such an effort could involve reconsidering the level of nonfederal jobs the government has selected to compare with federal jobs. That would mean across-the-board changes in the locality raises federal employees would otherwise receive and could have a significant budgetary impact. For example, if the government concluded that widespread overgrading warranted lowering by one level the nonfederal work that is compared with federal work, the pay gap could fall by between 15 and 20 percentage points.[5]

If misclassification is not widespread, however, the government could more appropriately deal with the problem directly through the classification system, correcting individual instances of error as it finds them. Under that approach, the primary impact would be on misclassified jobs, with a limited impact on near-term federal spending.

5. However the government chooses to address the problem of misclassification, translating any reductions in spending for salaries into near-term deficit reduction would require lowering the caps the government has set on overall spending. Without such action, Congressional committees and agencies could reallocate savings to other priorities.

The most direct method of dealing with misclassification is to move employees to the correct grade. In the case of downgrading, however, current statutes protect the grade and pay of workers, thus delaying savings to the government. Under those statutes, downgraded workers keep their same grade and pay for at least two years. Thereafter, workers whose salaries exceed the highest salary at the correct grade receive only half of the requlars pay adjustment until the top salary at the correct grade catches up. The government could eliminate or cut back protection of grade and pay, but such action would lower employee morale. And the prospect of a disrupted workplace might make federal managers reluctant to downgrade jobs at all.

As an alternative to changing grades, agencies can adjust the duties and responsibilities of a job to justify the current grade. No reductions in spending occur under this approach, but it often proves less disruptive and may make more sense for the day-to-day operation of an agency and for meeting demands for services. Some agencies, most notably DoD, already routinely try to find and correct errors in classification. Current efforts to reduce employment and reorganize government offer agencies a special opportunity to reallocate duties and responsibilities from jobs they have eliminated.

Errors in classification could increase, however, if agencies do not ensure that grade assignments stay current with work assignments. The Congress could encourage agencies to focus more attention on the accuracy of job classifications in its oversight hearings, but correcting misclassification entails costs. If the incidence of misclassification is as low as was suggested in DoD's audits, it probably does not merit the commitment of significant additional resources. However, even current levels of effort devoted to accurate classification may be threatened because federal employees who do that type of work are probably among the midlevel administrative staffs targeted for reduction under downsizing and reorganization plans. Of course, the Congress could always consider basic reform of the classification system, which offers the potential for benefits beyond enhanced accuracy. One approach would be to simplify the current grade structure (see Appendix B).

CONCERNS ABOUT HOW THE GOVERNMENT APPLIES LOCALITY RAISES

In establishing salary schedules and granting pay raises, the federal government has consistently relied on average rates that apply to a large variety of occupations and, in the case of the system that preceded FEPCA, to all geographic areas. Accordingly, some federal salaries will be higher or lower than corresponding salaries outside government. Federal systems have required that federal salaries be comparable with nonfederal salaries only on average. The practice of averaging pay raises has not caused the government to spend more or less, overall, than it would have otherwise;

in averaging, losses to some employees equal gains to others. Rather, the concern is primarily that some employees receive a larger or smaller piece of the pay-raise pie than necessary to ensure comparability with employees in similar jobs outside the federal government.

FEPCA has addressed part of the problem of over- and underpayments. Locality pay under FEPCA maintains the principle of comparability but also allows for local variation in rates. The new system, however, still groups occupations at each grade that often have widely varying rates of pay in the private sector. Thus, problems of over- and underpayment remain.

Consider, for example, the case of Oklahoma City, Oklahoma. In January 1994, GS salaries there increased by a uniform percentage to close partially an average pay gap estimated at 22.53 percent. (CBO prepared this analysis long before the tragic events in that city.) Yet data indicate that pay gaps varied greatly by grade within the area. Average differences in Oklahoma City ranged from an overpayment of 1 percent for grade 2 to an underpayment of 37 percent for grade 15 (see Table 8). Within grades, survey data reveal even wider disparities in pay. At grade 5, for example, pay differences ranged from an underpayment of 49 percent for professional occupations to an overpayment of 1 percent for the far more numerous clerical workers. Thus, the locality adjustment for 1994 fell short of the amount needed to move the salaries of federal professional workers toward comparability with those of their nonfederal counterparts. It also greatly exceeded the amount necessary to move clerical workers to comparability.

The pattern in the data for Oklahoma City is not unique. In general, current pay practices mean that employees in lower grades and less skilled occupations will generally receive pay raises above the amount necessary to reach pay comparability with similar workers outside the federal government, and employees in higher grades and occupations requiring greater skills will receive raises below the amount for comparability.

Governmentwide Impacts of Current Averaging Practices

To illustrate the widespread nature of over- and underpayment and the potential long-term consequences of current practice, CBO developed a scenario in which the government closed the entire locality gap in each region all at once. Under that scenario, the current system's practice of granting a flat, average raise to all workers regardless of grade or occupation would cause the pay of many professionals and similar employees to fall short of comparability by amounts that accumulate to 3.6

TABLE 8. PAY GAPS FOR OKLAHOMA CITY BY GRADE AND OCCUPATIONAL GROUP (In percent)

Grade	Occupation				
	All	Professional	Administrative	Technical	Clerical
1	n.a.	n.a.	n.a.	n.a.	n.a.
2	-1	n.a.	n.a.	n.a.	-1
3	11	n.a.	n.a.	28	4
4	12	n.a.	n.a.	14	11
5	6	49	10	17	-1
6	8	n.a.	n.a.	14	a
7	17	41	10	25	15
8	16	n.a.	n.a.	n.a.	17
9	19	39	8	28	n.a.
10	n.a.	n.a.	n.a.	n.a.	n.a.
11	21	32	17	20	n.a.
12	26	39	14	n.a.	n.a.
13	32	41	22	n.a.	n.a.
14	27	39	20	n.a.	n.a.
15	37	36	n.a.	n.a.	n.a.
All Grades	23	38	15	22	5

SOURCE: Congressional Budget Office using data for the 1994 locality pay raise provided by the Office of Personnel Management.

NOTES: The abbreviation n.a. indicates that data were not available, either because no employees had the grade and occupation indicated or because no nonfederal data could be found.

A minus sign indicates an overpayment--that is, the percentage by which federal salaries exceed nonfederal salaries.

a. Less than one-half of one percent.

percent of payroll, and pay for many less skilled employees would rise above comparability by the same overall amount.[6]

What effect would closing the full comparability gap have on federal workers? More than 1 million employees (about two-thirds of the GS workforce) hold jobs in occupations that would receive raises that, on average, exceeded the amount

6. CBO's estimate of 3.6 percent is based on data for the 1994 pay adjustment and represents the sum of the differences between the pay raises employees in 28 areas and five occupational groups would receive and the raises that would be needed to achieve comparability for each group in each area. Take, for example, an area with 100 professionals with payroll representing 1 percent of the total U.S. payroll. If those employees have a pay gap of 20 percent and would receive pay raises of 15 percent, CBO would count 100 employees as ending up short of comparability by 0.05 percent of payroll. Data on pay gaps, payroll, and employment by area and occupational group are from the Office of Personnel Management.

necessary to achieve comparability with their nonfederal counterparts. Of those 1 million employees, most of whom are in technical and clerical occupations, more than 200,000 would receive raises that, on average, were more than 10 percent above the level needed to achieve comparability. Conversely, over 400,000 employees, most of them in professional occupations, would receive less than the amount needed for comparability with workers in similar occupations. Almost 300,000 of them would be left short, on average, by 10 percent or more. Such data suggest that the current locality system recognizes differences in pay among regions but fails to address substantial, and sometimes greater, differences in pay among grades and occupations.

Granting Locality Raises by Grade or Occupational Group

Given the diversity and complexity of the federal workforce, no practical comparability system could match pay outside the federal government job for job. Most alternatives suggested over the years incorporate some grouping of workers for purposes of determining and granting pay increases. The current system groups by locality, but other groupings might permit closer matching of salaries and thus enhance federal efforts to hire and keep the workers it needs.

As an alternative to current practice, the government could amend FEPCA to allow for variation in raises by grade or some combination of grade and occupation. Most alternatives could be structured to represent simple redistributions of amounts that the government would otherwise have granted in raises and would therefore have no significant budgetary consequences. For example, if the government had differentiated raises in 1994 by occupational group and had held the average pay adjustment constant, employees in professional and other higher-skilled jobs would have received generally larger raises and those in clerical and other less skilled occupations would have received generally smaller raises. Based on data for 1994, raises for employees in jobs designated professional would have averaged 6.1 percent, and raises for employees in jobs designated clerical would have averaged 1.6 percent.

How might the government have allocated raises differently? In a 1989 study, the Wyatt Company reported that a survey of private-sector firms found that nearly all have nationwide pay systems for managers, professionals, and scientific positions.[7] Under such a system, for example, chief accountants would have the same pay scale across the country. According to the survey, firms use local labor markets to set pay primarily for technicians and clerical workers. A 1989 study by

7. Wyatt Company, *Study of Federal Employee Locality Pay* (Philadelphia: Wyatt Co., July 1989).

TABLE 9. COMPARISON OF OUTCOMES UNDER FULL COMPARABILITY FOR TWO PAY SYSTEMS

	Percentage of Payroll Misdirected[a]	Percentage of General Schedule Employees with Pay More Than 10 Percent: Below Comparability	Above Comparability
Current Locality-Based Pay System	3.6	17	13
Locality Pay System with Separate National System for Professional Occupations	1.7	1	11

SOURCE: Congressional Budget Office using data for 1994 provided by the Office of Personnel Management.

a. Misdirected payroll is the percentage of payroll that goes to over- and underpayments.

OPM offers some support for adopting a similar arrangement for federal employees.[8] In that study, OPM found that private-sector salaries for professional and administrative workers are more uniform among geographic areas than salaries for technical and clerical workers--suggesting some advantage in having a national system for the former group and a locality-based system, similar to current practice, for the latter group. Of course, other alternatives are possible. In fact, CBO's analysis suggests that the government could significantly improve the efficiency with which it allocates pay raises simply by taking employees in professional occupations out of the current system and establishing a separate national pay plan for them. (Other workers would remain, as a group, under the current locality-based system.)

A number of observations support the notion of having a separate national pay system for professionals. That group experiences less geographic variation in pay gaps than do other occupational groups. Professionals also account for almost all workers who receive pay raises that, under current practice, are well below the level necessary to match the salaries of professionals outside the federal government. Removing professional workers would also lower raises for employees remaining in the locality-based system and would thus reduce overpayments for the clerical workforce and others. For 1994, such a system would have produced a raise for professional workers averaging about 6 percent. Raises for all other employees

8. Office of Personnel Management, *Federal White-Collar Pay Systems: Report on a Market-Sensitive Study* (August 1989). For a summary of earlier proposals for reforming the federal pay system, see Robert W. Hartman, *Pay and Pensions for Federal Workers* (Washington, D.C.: Brookings Institution, 1983), pp. 77-106.

would have averaged about 3 percent. In addition, the portion of payroll misdirected under full comparability would drop to 1.7 percent from 3.6 percent under the current system (see Table 9). A definitive answer to the question of how best to allocate pay raises would require detailed information not currently available. CBO's analysis intends to show only that better arrangements are possible.

In addition to offering the chance to match salaries more closely, allowing for more alternatives in granting pay raises would facilitate consideration of other job market indicators, such as application rates, when setting pay. But having more alternatives would present practical problems. For example, with more differentiation in pay setting comes greater cost and complexity. The greater the level of disaggregation, moreover, the greater the difficulty in finding enough nonfederal data on which to base reliable comparisons. Finally, the more emphasis that is given to occupational groups or grades in setting pay, as opposed to geographic area or other factors, the smaller the raises are for employees at the low end of the job hierarchy, where women and minorities are represented in significant numbers. The benefits of further refinements to pay setting must be weighed against such costs.